Product Type

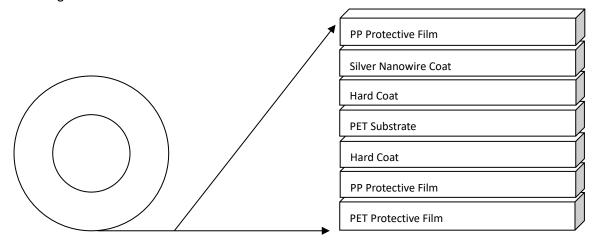
Part Number: NF-CT-45S-125-P8D

Sheet Resistance: 45ohm

Width: 1240mm

Product Structure

Winding Direction:



Product Specification

Test Items		Unit	Specification	Test Instrument & Methodology
Dimension	Width	mm	1240±5	Gauge
	Disclaim area	mm	5*2	Gauge
	Thickness	um	125±5	Gauge
Optical Characteristic	Transmittance	%	≥89%	hunterlab
	Haze	%	≤2.2%	hunterlab
	Color index (b*)	-	≤2.4	hunterlab
Electrical	Sheet Resistance	Ω/□ 45±5		Faur mainta mucha
Characteristic	Resistance uniformity	-	≤10%	Four-points probe

Test Items		Unit	Specification	Test Instrument & Methodology
Shrinkage Rate	MD direction	%	<1%	JISK 7133(150°C60min)

	TD direction	%	<1%	
Adhesion	AgNW layer	-	5B	Cross-cut test Cross-hatch tester; 3M (610)tape
				Cross-natch tester, Sivi (610)tape
Pencil Hardness	AgNW layer	-	НВ	JISK5600(Load 500g)
	H/C layer	-	1H	JISK5600(Load 500g)

Product Reliability

Channel Reliability Test

Test Items	Test Sample	Test Condition	Specification
High Temperature High Humidity	OCA release liner	85℃ 85%RH 240hrs	
High Temperature Storage	OCA CITY OF	80°C 240hrs	Resistance variation
Xenon Aging	Conductive film OCA: 3M 8146/8305 HG 7335-H	1000W/m2@250-1100 nm 240hrs	≤10%

Cosmetic Inspection

Inspection Condition:

1. Luminance: 800~1200 lux

2. View Angle: 45°

3. Inspection Distance: 35±5cm

4. Inspection time: 15±3s

Inspection Items	Criteria	Criteria Rank		
Spot Defect	D≤0.1mm; DS <u>></u> 10mm	Acceptable		
	0.1mm <d≤0.5mm DS<u>></u>10mm,N≤3</d≤0.5mm 	Acceptable	Sample size: 1m	
	D>0.5mm	Unacceptable	'	
Line/Scratch Defect	W≤0.02mm	Acceptable	Visual inspection	
	0.02mm <w≤0.05mm; L<5mm; DS≥10mm N≤2</w≤0.05mm; 	Acceptable	Judge by gage	
	W>0.05mm or L≥5mm	Unacceptable		

Product Storage Requirements

(1) Keep product at temperature: 20±10°C; Humidity: 50%±20%RH. Avoid the environment with

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high temperature and high humidity.

(2) Please place the product level to avoid crushing and stacking.

Handling Guidelines

- (1) Please handle the product with gloves wearing. Please do not touch the conductive AgNW layer of the product once the protective film is released.
- (2) Please do not use hard objects to wipe the surface of the product, in order to prevent scratch.
- (3) The product can be used for laser etching, screen printing, and chemical etching processes. Please refer to Nuovo Film's application notes for process parameters.
- (4) Please use <u>neutral (acid-free) OCA</u> for lamination. During transportation, please use <u>acid-free</u> protective film.
- (5) Please ensure that laminating adhesive, frame glue, cover glass and printing ink, etc. used do not contain acids, sulfides (H2S, SO2, CS2, COS, S8, etc.), halogens, and other oxidizing substances.
- (6) After touch panel lamination, the FPC bonding area needs waterproof adhesive.
- (7) When supplement materials or core manufacturing processes change, be sure to conduct material compatibility tests in advance, following Nuovo Film's reliability test condition guidelines.

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